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APPLICATION FOR UNITED STATES LETTERS PATENT

Title:

**SCALP MASSAGING AND HAIR DETANGLING HAIR BRUSH**

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**SCALP MASSAGING AND  
HAIR DETANGLING HAIR BRUSH**

**FIELD OF THE DISCLOSURE**

The disclosure relates generally to a hair brush having a plurality of bristles for  
5 both detangling hair and massaging the scalp, and more particularly, to a hair brush  
having a first set of bristles disposed on a perimeter of the hair brush for detangling hair  
and a second set of bristles disposed near a center of the hair brush for massaging the  
scalp.

**BACKGROUND OF THE DISCLOSURE**

10 Hair brushes having massaging capabilities and hair brushes having multiple  
bristles configurations are generally known in the art. For example, U.S. Patent  
4,161,050 discloses a hair brush having bristles with various lengths designed to improve  
the brushing effect and to enable a massaging action. More specifically, the hair brush  
includes longer bristles having substantially spherical ends for massaging the scalp, and  
15 shorter bristles for brushing the strands of hair.

In another example, U.S. Patent 5,095,892 discloses a brush for use on the hair  
and body, having a wooden base and a concavity therein. The brush further includes an  
elastic bristles base having many orifices for planting wooden bristles. As such, with the  
wooden bristles the brush may be used not only for brushing strands of hair, but also for  
20 massaging the skin. In a further example, U.S. Patent 5,095,892 disclosed a travel  
massage brush having a vibratory head pivotally connected to a handle. The vibratory  
head is electric powered, and more specifically, is battery operated and includes a  
vibratory motion impartor that creates the massaging motion.

## SUMMARY OF THE DISCLOSURE

In accordance with one aspect of the disclosure, a first end of a hair brush body includes a head having a first side, a second side, and a perimeter. A first set of bristles is disposed on the first side of the head, and a second set of bristles that is more forgiving  
5 than the first set of bristles, is disposed between the first set of bristles and the perimeter of the brush head.

In accordance with another aspect, a hair brush having a head on a first end of a body, including a first side, a second side, and a perimeter is disclosed. A plurality of first and second bristles are disposed on the first side of the brush head, and at least one of  
10 the plurality of second bristles is disposed between the plurality of first bristles and the perimeter of the brush head. The first bristles are stiffer than the second bristles.

In accordance with a further aspect, a hair brush having a handle at a second end of a body and a head having an inner portion and an outer portion at a first end of the body is disclosed. A plurality of first bristles is disposed near the inner portion of the  
15 brush head, and a plurality of second bristles is disposed near the outer portion of the brush head. The first bristles are stiffer than the second bristles.

In accordance with an additional aspect, a hair brush having a head including a receiving portion at a first end of the body is disclosed. A cushion pad is disposed in the receiving portion, and has a convex cross-sectional shape. A plurality of first bristles is  
20 disposed near an upper portion of the convex cushion pad, and a plurality of second bristles is disposed near a lower portion of the convex cushion pad.

## BRIEF DESCRIPTION OF THE DRAWINGS

The advantages of the present invention will be apparent upon reading the following description in conjunction with the drawings, in which:

Fig. 1 is perspective view of one embodiment of a hair brush having a first set of bristles and a second set of bristles;

Fig. 2 is an exploded perspective view the hair brush of Fig. 1;

Fig. 3 is a cross sectional view along line 3-3 of the hair brush of Fig. 2;

5 Fig. 4 is a side view of a bristle from the second set of bristles of the hair brush of Fig. 1;

Fig. 5 is a side view of a bristle from the first set of bristles of the hair brush of Fig. 1;

Fig. 6 is a plan view of the hair brush of Fig. 1;

10 Fig. 7 is a plan view of an alternative embodiment of a hair brush having a first set of bristles and a second set of bristles;

Fig. 8 is a plan view of a further alternative embodiment of a hair brush having a first set of bristles and a second set of bristles; and

15 Fig. 9 is a plan view of a still further embodiment of a hair brush having a first set of bristles and a second set of bristles.

While the invention is susceptible to various modifications and alternative constructions, certain illustrative embodiments thereof have been shown in the drawings and will be described below in detail. It should be understood, however, that there is no intention to limit the invention to the specific forms disclosed, but, on the contrary, the  
20 intention is to cover all modifications, alternative constructions, and equivalents falling within the spirit and scope of the disclosure and the appended claims.

#### DETAILED DESCRIPTION

Referring now to the drawings, and with specific reference initially to Fig. 1, a hair brush 20 includes a body 22, a cushion pad 24, a first set of bristles 26, and a second

set of bristles 28. The hair brush 20, as depicted in Fig. 1, is only one exemplary type of hair brush 20 and, more particularly, one exemplary type of hair brush head that may be used in conjunction with the present disclosure. The hair brush 20 and the cushion pad 24 are, therefore, not limited to the disclosed embodiment as depicted in Fig. 1.

5           The hair brush 20, as disclosed herein, is intended to enable the user to both brush/detangle strands of hair and to massage the scalp. More specifically, the first and second set of bristles 26, 28 of the hair brush 20 are constructed and/or arranged relative to each other to enable the user to both brush strands of hair and to massage the scalp during a single stroke of the hair brush 20.

10           In the exemplary embodiment illustrated in Figs. 1 and 2, the body 22 includes a first end 30 and a second end 32. The body 22 may be constructed from a plastic material, or alternatively may be constructed from a metal material, wood, rubber, and/or a combination thereof. A handle 34 is disposed near the first end 30 of the body 22, and a head 35 having a receiving portion 36 is disposed near the second end 32 of the body 22.

15           The handle 34 may be sized and shaped to ergonomically fit into a user's hand, and the receiving portion 36 may include a cavity 38 and a lip 40, as best seen in Fig. 2. More specifically, as seen in Figs. 2 and 3, the cavity 38 may be disposed toward a center of the receiving portion 36 and may be adapted to receive the cushion pad 24. The lip 40 may be disposed around a perimeter of the cavity 36, which may aid in retaining the cushion  
20           pad 24 in the cavity 38. The size and/or the shape of the cavity 38 may correspond to the size and/or shape of the cushion pad 24. As such, a perimeter of the cushion pad 24 may be disposed near and/or under the lip 40, thereby enclosing the cavity 38 with the cushion pad 24. The cushion pad 24 may, however, be attached or connected to the cavity 36, receiving portion 36, and/or the head 35 in many other ways, and as such, the disclosure  
25           is not limited above described embodiment.

The head 35 of the hair brush 20 includes a first or top side 37, including the receiving portion 38 and second or bottom side 41 located opposite the first side 37. The head 35 may have a variety of shapes, including but not limited to, generally oval, rectangular, square, round, or odd shaped, and includes a perimeter 39. More  
5 specifically, as seen in Figs. 1 and 2, the perimeter 39 of the head 35 of the hair brush 20 may be disposed at an outer edge of the head 35, and may be disposed between the outer edge of the head 35 and the receiving portion 36 and/or the cushion pad 24. In those embodiments wherein the hair brush 20 does not include the cushion pad 24 and/or the receiving portion 36, the perimeter of the head 35 may be located at the outer edge of the  
10 head 35, and/or may be located between the outer edge of the head 35 and the first bristles encountered from the outer edge of the head 35 going inward.

The cushion pad 24, like the body 22 of the brush 20, may be constructed from a number of materials, including but not limited to, plastic, rubber, etc. The cushion pad 24 may include an upper surface 42 facing away from the brush 20 and a lower surface 44  
15 facing toward the cavity 38. A plurality of apertures 46 may be disposed in the cushion pad 24 for receiving the bristles of the first and/or second set of bristles 26, 28. The apertures 46 may, therefore, vary in size or diameter to accommodate both sets of bristles. The apertures 46 may be blind, but may also fully penetrate the cushion pad 24 extending from the upper surface 42 to the lower surface 44. Additionally and/or alternatively, the  
20 bristles 26, 28, may be attached or connected to the cushion pad 24 in one or more various ways, as seen in Fig. 3.

Furthermore, the cushion pad 24 may have a dome or convex shape when disposed in the cavity 38. As such, the bristles, whether from the first or second set of bristles 26, 28, disposed near an upper portion and/or the apex of the convex cushion pad  
25 24, may be located a distance further from the head 35 of the brush 20 than the bristles

disposed near a lower portion and/or near the perimeter of the convex cushion pad 24.

This difference in height may also be accomplished by varying the length of the bristles 26, 28, such as for example, lengthening the first set of bristles 26 relative to the second set of bristles 28.

5           The first set of bristles 26 (Fig. 5) may include a first or free end 48 adapted to massage the user's scalp during use, and a second or attachment end 50 adapted to engage and/or attach to the cushion pad 24. The first set of bristles 26 may be constructed from a plastic material, but may be constructed from a metal material, wood, and/or a combination thereof. The first set of bristles 26 may further include a spherical, semi-  
10           spherical, or substantially round tip 52 disposed at the free end 48. Furthermore, the first set of bristles 26, as seen in Fig. 5, may also be defined using several qualities, including a first height, a first thickness, and a first stiffness.

          Similar to the first set of bristles 26, the second set of bristles 28 (Fig. 4) may include a first or free end 54 adapted to brush/detangle the user's strands of hair during  
15           use, and a second or attachment end 56 adapted to engage and/or attach to the cushion pad 24. The second set of bristles 28 may be constructed from a plastic material, but may be constructed from a metal material, wood, and/or a combination thereof. The second set of bristles 28 may further include a spherical, semi-spherical, or substantially round tip 58 disposed at the free end 54. Furthermore, the second set of bristles 28, as seen in  
20           Fig. 4, may also be defined using several qualities, including a second height, a second thickness, and a second stiffness.

          In one exemplary embodiment, as seen in Figs. 2 and 6, the second end 32 of the body 22 may include the cushion pad 24 and have a generally oval shape. The first and second set of bristles 26, 28, in this embodiment, may be arranged and/or disposed  
25           relative to each other such that the second set of bristles 28 are located between the first

set of bristles 26 and the perimeter 36 of the brush head 35. Alternatively and/or additionally, the first set of bristles 26 may be disposed to the center of the head 35 of the brush 20, and the second set of bristles 28 may be disposed around the first set of bristles 26 or near the perimeter of the cushion pad 24. The first set of bristles 26, in this  
5 embodiment, may be adapted to massage the scalp, as opposed to the second set of bristles 28, which may be adapted to brush/detangle the strands of hair. As such, the first set of bristles 26 may differ from the second set of bristles 28, in that the first set of bristles 26 may be larger, stiffer, longer, harder, and/or wider than the second set of bristles 28.

10 In another exemplary embodiment, as seen in Fig. 7, the second end 32 of the body 22 may include vent apertures 60 for allowing air, and more specifically, hot hair (i.e. from a hair dryer) to penetrate the hair brush 20 to better effectuating the drying and/or styling of the hair. The vent apertures 60 may have a generally rectangular shape, as seen in Fig. 7, but may have any shape, including but not limited to, round, square,  
15 oval, odd, etc. The first and second set of bristles 26, 28, in this embodiment, may be arranged and/or disposed relative to each other such that the second set of bristles 28 are located between the first set of bristles 26 and the perimeter 36 of the brush head 35. Alternatively and/or additionally, the first set of bristles 26 may be disposed to the center of the head 35 of the brush 20, and the second set of bristles 28 may be disposed around  
20 the first set of bristles 26. The first set of bristles 26, in this embodiment, may be adapted to massage the scalp, as opposed to the second set of bristles 28, which may be adapted to brush/detangle the strands of hair. As such, the first set of bristles 26 may differ from the second set of bristles 28, in that the first set of bristles 26 may be larger, stiffer, longer, harder, and/or wider than the second set of bristles 28.



In another exemplary embodiment, as seen in Fig. 8, the second end 32 of the body 22 may include the cushion pad 24 and have a generally oval shape. The first and second set of bristles 26, 28, in this embodiment, may be arranged and/or disposed relative to each other such that at least a portion of the second set of bristles 28 is located  
5 between the first set of bristles 26 and the perimeter 36 of the brush head 35.

Alternatively and/or additionally, the first set of bristles 26 may be disposed to the center of the head 35 of the brush 20, and at least a portion of the second set of bristles 28 may be disposed around the first set of bristles 26 or near the perimeter of the cushion pad 24. The first set of bristles 26, in this embodiment, may be adapted to massage the scalp as  
10 opposed to the second set of bristles 28, which may be adapted to brush/detangle the strands of hair. As such, the first set of bristles 26 may differ from the second set of bristles 28, in that the first set of bristles 26 may be larger, stiffer, longer, harder, and/or wider than the second set of bristles 28.

In another exemplary embodiment, as seen in Fig. 9, the second end 32 of the  
15 body 22 may include the cushion pad 24 and have a generally round shape. The first and second set of bristles 26, 28, in this embodiment, may be arranged and/or disposed relative to each other such that the second set of bristles 28 are located between the first set of bristles 26 and the perimeter 36 of the brush head 35. Alternatively and/or additionally, the first set of bristles 26 may be disposed to the center of the head 35 of the  
20 brush 20, and the second set of bristles 28 may be disposed around the first set of bristles 26 or near the perimeter of the cushion pad 24. The first set of bristles 26, in this embodiment, may be adapted to massage the scalp, as opposed to the second set of bristles 28, which may be adapted to brush/detangle the strands of hair. As such, the first set of bristles 26 may differ from the second set of bristles 28, in that the first set of

bristles 26 may be larger, stiffer, longer, harder, and/or wider than the second set of bristles 28.

The disclosure is, however, not limited to the above exemplary embodiments, nor is the disclosure limited to the combination of components of the above exemplary  
5 embodiments. For example, whether the head 35 of the brush 20 is round, square, rectangular, or any other shape, the hair brush 20 may include a cushion pad 24.

Similarly, the hair brush 20 may not include the cushion pad 24 when the head 35 has an oval or round shape. Similarly, the shape created by the first set of bristles 26 and the shape created by the second set of bristles 28 may correspond to each other, or

10 alternatively may be independent of each other. For example, as seen in Fig. 6, the hair brush 20 as an oval shaped brush head 35, the first set of bristles 26 create an oval shape (outlined by the phantom line), and the second set of bristles 28 create an oval shape.

Similarly, as seen in Fig. 7, the hair brush 20 as a rectangular shaped brush head 35, the first set of bristles 26 create a rectangular shape (outlined by the phantom line), and the  
15 second set of bristles 28 create an oval shape, and as seen in Fig. 9, the hair brush 20 as a round shaped brush head 35, the first set of bristles 26 create a star shape (outlined by the phantom line), and the second set of bristles 28 create a round shape. The shape created by the first set of bristles 26 may, therefore, be round, square, rectangular, or odd shaped regardless of the shape of the second set of bristles 28, and/or the brush head 35.

20 In operation, a user may brush/detangle strands of hair, and massage the scalp in a single stroke of the hair brush 20. More specifically, due to the relative location of the first and second set of bristles 26 and 28 on the hair brush 20, the user is insured that both the strands of hair get brushed/detangled, and that the scalp gets massaged. The second set of bristles 28 will encounter the strands of hair first, thereby brushing/detangling the  
25 strands of hair. Next, the first set of bristles 26 will encounter the scalp, thereby

massaging the scalp. Finally, the second set of bristles 28 will again encounter the strands of hair first, thereby completing the brushing/detangling of the strands of hair.

While the above has been described with reference to specific examples which are intended to be illustrative only and not to be limiting of the invention, it will be apparent  
5 to those of ordinary skill in the art that changes, additions or deletions may be made to the disclosed embodiments without departing from the spirit and scope of the invention.